Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DARRELL LYNN WERTZ,
PHILIP CLAY BRANDBERG
and BRENT DAVID YOHN

Appeal No. 2003-1908
Application No. 09/747,608

ON BRIEF

Before MCQUADE, NASE, and BAHR, Administrative Patent Judges.

MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Darrell Lynn Wertz et al. appeal from the final rejection of claims 1 through 25, all of the claims pending in the application.

THE INVENTION

The invention relates to a "three point contact design that may be used to connect varied electrical components to circuit boards such that the components may be assembled or installed on the circuit board and removed from the board without the need for time consuming soldering and desoldering of the component leads"

(specification, page 1). Representative claims 1 and 12 read as follows:

1. An electrical spring contact for use with varied electrical components, said spring contact comprising:
a body section, said body section being attachable at one end to a circuit board;
two arms attached to opposite sides of the body section, said two arms defining a separation therebetween, said arms each having an elbow section extending each arm towards the opposite arm; and
a center section attached to the body section between the two arms whereby an electrical component lead can be held approximately in an orthogonal orientation to the body section and between the center section and the two arms, said electrical component lead being in electrical contact with the center section and the two arms.

12. An electrical contact assembly, having at least one electrical component, said electrical component having at least one electrical lead, said contact assembly comprising:
a housing into which the electrical component fits and is held; and
at least one electrical spring contact held within the housing, said electrical spring contact comprising,
a body section, said body section being attachable at one end to a circuit board;
two arms attached to opposite sides of the body section, said two arms defining a separation therebetween, said arms each having an elbow section extending each arm towards the opposite arm; and
a center section attached to the body section between the two arms whereby an electrical component lead can be held approximately in an orthogonal orientation to the body section and between the center section and the two arms, said electrical component lead being in electrical contact with the center section and the two arms.

THE PRIOR ART

The references relied on by the examiner to support the final rejection are:

Takeuchi et al. (Takeuchi)	4,232,931	Nov. 11, 1980
Gronowicz, Jr. et al. (Gronowicz)	6,109,973	Aug. 29, 2000

THE REJECTIONS

Claims 1 through 5, 8 through 10 and 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Takeuchi.

Claims 6, 7, 11 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over by Takeuchi.

Claims 12 through 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gronowicz in view of Takeuchi.

Attention is directed to the main and reply briefs (Paper Nos. 13 and 16) and to the answer (Paper No. 14) for the respective positions of the appellants and examiner regarding the merits of these rejections.

DISCUSSION

I. The 35 U.S.C. § 102(b) rejection of claims 1 through 5, 8 through 10 and 12 as being anticipated by Takeuchi

Takeuchi discloses "a connector for electrically connecting coaxial cables and, more particularly, to a receptacle capable of electrically connecting cable conductors of a large variety of different diameters" (column 1, lines 5 through 9). In general,

the receptacle 1, which is made of phosphor bronze, consists of an axial wall member 2, a pair of vertical lip bases 3 and 5, a pair of resilient projecting lips 4 and 6 and a resilient second lip 7, these elements being arranged as shown in Figures 1 through 5 to define two contact regions Q1 and Q2. Figure 7 shows the receptacle disposed within a housing composed of an insulating sleeve 8 and a plug 9. A mating cable conductor 14' in longitudinal alignment with the receptacle engages contact regions Q1 and Q2.

Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). It is not necessary that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or fully met by the reference. Kalman v. Kimberly Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

As framed by the appellants (see pages 4 through 7 in the main brief and pages 1 through 7 in the reply brief), the

dispositive issue with respect to the anticipation rejection of claims 1 through 5, 8 through 10 and 12 is whether Takeuchi meets the limitations in independent claims 1, 8 and 12 requiring

> a center section attached to the body section between the two arms whereby an electrical component lead can be held approximately in an orthogonal orientation to the body section and between the center section and the two arms, said electrical component lead being in electrical contact with the center section and the two arms.

The examiner, finding correspondence between the center section, body section and two arms recited in the appellants' claims and the second lip 7, axial wall member 2 and projecting lips 4 and 6 disclosed by Takeuchi, submits that the Takeuchi contact or receptacle 1 is inherently capable of holding an electrical component lead approximately in an orthogonal orientation to the body section and between the center section and the two arms with the electrical component lead being in electrical contact with the center section and the two arms as recited in claims 1, 8 and 12.

The appellants counter that Takeuchi does not teach or suggest anything of the sort and that the contact or receptacle disclosed therein is not capable of performing the specified function. The following passage from the main brief fairly summarizes the appellants' position:

> The presently claimed spring contact provides that an electrical component lead may be held by only three elements, being the two arms and the center section, in an approximate orthogonal orientation to the connector, and at the same approximate location or cross section of the component lead. Figures 2, 3, 4, and 5 of Takeuchi *et al.* plainly show that the coaxial cable, or any lead, physically cannot be held approximately orthogonally between a center section and two arms, *and* be in electrical contact with the center section and the two arms. Indeed, Figs. 3 and 5 show that the Takeuchi *et al.* center section is in fact two arms, 7 and 2, and is not a single section as claimed and shown for the inventive contact. Further, because Takeuchi *et al.* has two contact regions along the length of the electrical lead, there is no suggestion within Takeuchi *et al.* to hold the lead orthogonally to the body of the connector [page 6].

Claims 1 and 8 recite an electrical contact per se, not an electrical contact in combination with an electrical component lead. The language in these claims relating to the electrical component lead is strictly functional in nature in that it defines the claimed contact by what it is intended to do rather than by what it is. While there is nothing intrinsically wrong with the use of this technique in drafting a patent claim, it is well settled that the recitation of a new intended use for an old product does not make a claim to that product patentable. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). Thus, it is not fatal to the examiner's finding of anticipation that Takeuchi admittedly fails to teach or suggest that an electrical component lead can be held approximately in an

orthogonal orientation to the body section and between, and in electrical contact with, the center section and the two arms.

Notwithstanding the view held by the appellants, Takeuchi's Figures 2 through 5 do not establish that a lead cannot be physically held approximately orthogonally between, and in electrical contact with, center section 7 and arms 4 and 6. To the contrary, these drawing figures provide a reasonable basis for the examiner's determination that an appropriately sized and shaped lead inherently could be so held between, and in electrical contact with, the center section and arms, thereby meeting the functional claim language in question. Claims 1 and 8 place no restriction on the size and/or shape of the lead mentioned therein. Thus, Exhibits A and B, appended to the reply brief to show that a lead of the particular size and shape disclosed by Takeuchi could not be held as recited in claims 1 and 8, is unconvincing because it is not commensurate with the rather broad language in these claims pertaining to the component lead. Furthermore, the subject claim language does not, as urged by the appellants, require that the lead be held at only three points at a common cross-section or that the center section be a single piece.

Thus, the appellants' position that the subject matter recited in independent claims 1 and 8, and dependent claims 2 through 5, 9 and 10, distinguishes over Takeuchi is not persuasive. We shall therefore sustain the standing 35 U.S.C. § 102(b) rejection of these claims as being anticipated by Takeuchi.

Claim 12, on the other hand, recites an electrical contact assembly "having at least one electrical component . . . having at least one electrical lead" and comprising a housing and at least one electrical spring contact. The only electrical component lead shown in Takeuchi's Figure 7, which the examiner cites as being anticipatory of the subject matter recited in claim 12 (see page 4 in the answer), is cable conductor 14'. Cable conductor 14', however, is not held approximately in an orthogonal orientation to the body section of the receptacle/contact 1 and between, and in electrical contact with, its center section 7 and two arms 4 and 6, and is not ostensibly capable of being so held.

Hence, in contrast to claims 1 and 8, the appellants' position that the subject matter recited in independent claim 12 defines over Takeuchi is well taken. Therefore, we shall not

sustain the standing 35 U.S.C. § 102(b) rejection of claim 12 as being anticipated by Takeuchi.

II. The 35 U.S.C. § 103(a) rejection of claims 6, 7, 11 and 13 as being unpatentable over by Takeuchi

Dependent claims 6, 7, 11 and 13 set forth additional characteristics of the electrical contact. The appellants do not dispute the examiner's determination that Takeuchi would have suggested a contact having these characteristics, but instead argue that the rejection is unsound due to Takeuchi's alleged deficiencies relative to parent claims 1, 8 and 12. For the reasons expressed above, this line of argument is convincing with regard to claim 12, but not with regard to claims 1 and 8.

Accordingly, we shall sustain the standing 35 U.S.C. § 103(a) rejection of claims 6, 7, 11 and 13 as being unpatentable over by Takeuchi with respect to claims 6 and 7, which depend indirectly from claim 1, and claim 11, which depends from claim 8, but not with respect to claim 13, which depends from claim 12.

III. The 35 U.S.C. § 103(a) rejection of claims 12 through 25 as being unpatentable over Gronowicz in view of Takeuchi

Gronowicz discloses an electrical connector 10 comprising a housing 14, terminals 44 disposed within the housing, and a

circuit component 48 having contacts or leads 48b engaged with the terminals 44.

The examiner concedes that this assembly, and specifically the terminals 44, do not meet the limitations in independent claim 12, or the corresponding limitations in independent claim 18, relating to the electrical spring contact. To overcome this deficiency, the examiner turns to Takeuchi and concludes that it would have been obvious "to use the Takeuchi contact in the Gronowicz housing . . . to allow connection with contact pins having a varying diameter, as discussed in Takeuchi" (answer, page 5). Gronowicz, however, does not indicate that connection with contact pins or leads of varying size poses any sort of problem. Simply put, the only suggestion for replacing Gronowicz's terminals 44, specifically designed to mate with the leads 48b of a circuit component 48, with Takeuchi's receptacle 1, specifically designed to mate with a cable conductor of a coaxial cable, stems from hindsight knowledge impermissibly derived from the appellants' disclosure.

Accordingly, we shall not sustain the standing 35 U.S.C. § 103(a) rejection of independent claims 12 and 18, and dependent claims 13 through 17 and 19 through 25, as being unpatentable over Gronowicz in view of Takeuchi.

SUMMARY

The decision of the examiner to reject claims 1 through 25 is affirmed with respect to claims 1 through 11 and reversed with respect to claims 12 through 25.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

JOHN P. MCQUADE Administrative Patent Judge	)
	) BOARD OF PATENT
	) APPEALS AND
JEFFREY V. NASE Administrative Patent Judge	) INTERFERENCES
JENNIFER D. BAHR Administrative Patent Judge	)

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